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FILE 'HOME' ENTERED AT 12:23:49 ON 27 AUG 2007

=> **file registry**

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.21	0.21

FILE 'REGISTRY' ENTERED AT 12:24:10 ON 27 AUG 2007

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 26 AUG 2007 HIGHEST RN 945604-45-5
DICTIONARY FILE UPDATES: 26 AUG 2007 HIGHEST RN 945604-45-5

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH June 29, 2007

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/support/stngen/stndoc/properties.html

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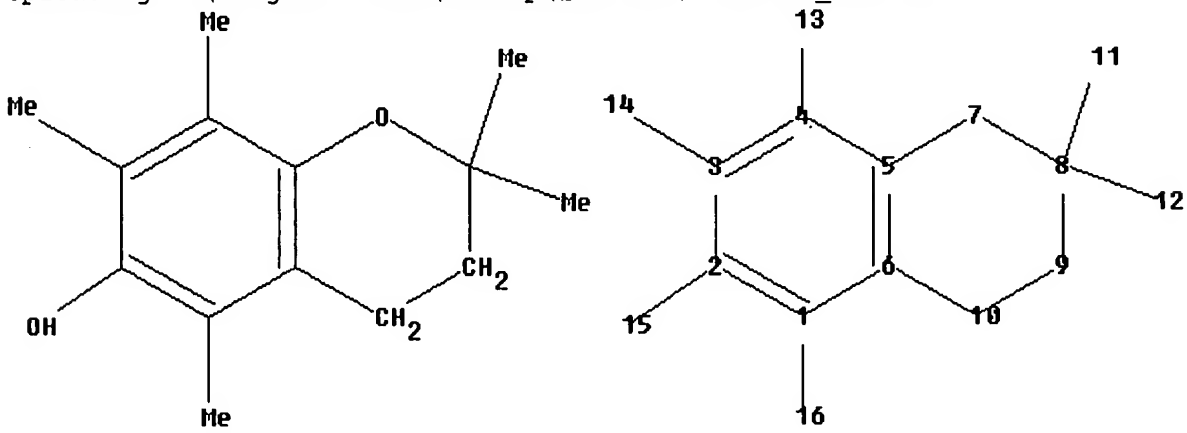


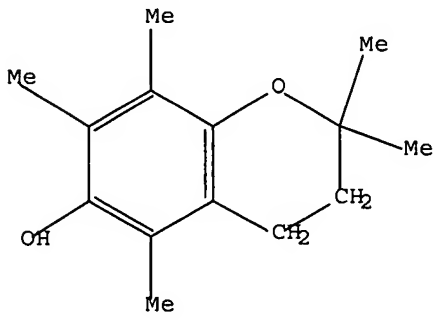
chain nodes :
11 12 13 14 15 16
ring nodes :
1 2 3 4 5 6 7 8 9 10
chain bonds :
1-16 2-15 3-14 4-13 8-11 8-12
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 5-7 6-10 7-8 8-9 9-10

exact/norm bonds :
2-15 5-7 6-10 7-8 8-9 9-10
exact bonds :
1-16 3-14 4-13 8-11 8-12
normalized bonds :
1-2 1-6 2-3 3-4 4-5 5-6

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:Atom 8:Atom 9:Atom 10:Atom
11:CLASS 12:CLASS 13:CLASS 14:CLASS 15:CLASS 16:CLASS

L1 STRUCTURE UPLOADED

=> d l1
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

=> **s l1 exa full**
FULL SEARCH INITIATED 12:24:28 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 68 TO ITERATE

100.0% PROCESSED 68 ITERATIONS 8 ANSWERS
SEARCH TIME: 00.00.01

L2 8 SEA EXA FUL L1

=> **file medline, caplus, wpids, uspatfull**

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	58.25	58.46

FILE 'MEDLINE' ENTERED AT 12:24:41 ON 27 AUG 2007

FILE 'CAPLUS' ENTERED AT 12:24:41 ON 27 AUG 2007

FILE 'WPIDS' ENTERED AT 12:24:41 ON 27 AUG 2007
COPYRIGHT (C) 2007 THE THOMSON CORPORATION

FILE 'USPATFULL' ENTERED AT 12:24:41 ON 27 AUG 2007
CA INDEXING COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

=> s l2
SAMPLE SEARCH INITIATED 12:24:45 FILE 'WPIDS'
SAMPLE SCREEN SEARCH COMPLETED - 62 TO ITERATE

100.0% PROCESSED 62 ITERATIONS 0 ANSWERS
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS: ONLINE **COMPLETE**
BATCH **COMPLETE**
PROJECTED ITERATIONS: 384 TO 856
PROJECTED ANSWERS: 0 TO 0

L3 511 L2

=> **s l3 and "prostate cancer"**
2 FILES SEARCHED...
L4 11 L3 AND "PROSTATE CANCER"

=> **d l4 1-11 ibib, abs, hitstr**

L4 ANSWER 1 OF 11 MEDLINE on STN
ACCESSION NUMBER: 2003400986 MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 12939470
TITLE: Androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells.
AUTHOR: Thompson Todd A; Wilding George
CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center, University of Wisconsin-Madison, Madison, Wisconsin 53792, USA.
SOURCE: Molecular cancer therapeutics, (2003 Aug) Vol. 2, No. 8, pp. 797-803.
Journal code: 101132535. ISSN: 1535-7163.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200406
ENTRY DATE: Entered STN: 27 Aug 2003
Last Updated on STN: 24 Jun 2004
Entered Medline: 21 Jun 2004

AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP

and LAPC4 cells, with an IC(50) of approximately 10 micro M against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, respectively, by 30 micro M PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

L4 ANSWER 2 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:120717 CAPLUS Full-text
DOCUMENT NUMBER: 142:170094
TITLE: Chroman-derived antiandrogens for treatment of androgen-mediated disorders
INVENTOR(S): Thompson, Todd A.; Wilding, George
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005011658	A2	20050210	WO 2004-US5872	20040227
WO 2005011658	A3	20050519		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
RW: BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2004260631	A1	20050210	AU 2004-260631	20040227
CA 2517390	A1	20050210	CA 2004-2517390	20040227
US 2005192342	A1	20050901	US 2004-789835	20040227
EP 1596857	A2	20051123	EP 2004-785845	20040227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: US 2003-450510P P 20030227
WO 2004-US5872 A 20040227

OTHER SOURCE(S): MARPAT 142:170094

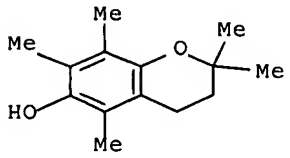
AB Methods for the prevention and/or alleviation of androgen-mediated disorders treatable by administering a chroman-derived antiandrogen compound are provided by the invention. The invention further provides pharmaceutical and nutraceutical compns. containing chroman-derived antiandrogen compds. useful in the prevention and/or alleviation of androgen-mediated disorders, particularly prostate cancer. Compds. of the invention include e.g. 2,2,5,7,8-pentamethyl-6-chromanol.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(chroman-derived antiandrogens for treatment of androgen-mediated disorders)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 3 OF 11 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:665773 CAPLUS Full-text

DOCUMENT NUMBER: 140:52950

TITLE: Androgen Antagonist Activity by the Antioxidant Moiety of Vitamin E, 2,2,5,7,8-Pentamethyl-6-chromanol in Human Prostate Carcinoma Cells

AUTHOR(S): Thompson, Todd A.; Wilding, George

CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center and University of Wisconsin Department of Medicine, University of Wisconsin-Madison, Madison, WI, 53792, USA

SOURCE: Molecular Cancer Therapeutics (2003), 2(8), 797-803
CODEN: MCTOCF; ISSN: 1535-7163

PUBLISHER: American Association for Cancer Research

DOCUMENT TYPE: Journal

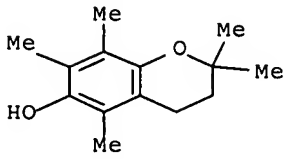
LANGUAGE: English

AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC50 of approx. 10 μM against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, resp., by 30 μM PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

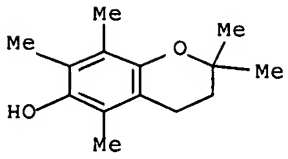
L4 ANSWER 4 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2006:27860 USPATFULL Full-text
TITLE: Novel pathways in the etiology of cancer
INVENTOR(S): Benz, Christopher C., Novato, CA, UNITED STATES
PATENT ASSIGNEE(S): Buck Institute for Age Research (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006024691	A1	20060202	
APPLICATION INFO.:	US 2005-90546	A1	20050324	(11)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-556774P	20040325	(60)
	US 2004-580534P	20040616	(60)
	US 2004-629691P	20041119	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Page(s)
LINE COUNT: 2824
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB This invention pertains to the identification of two novel epithelial signaling pathways in ER-positive breast cancer s and the discovery that the cellular biology and (likely also the clinical outcome) of ER-positive breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF-κB activation and/or DNA binding is implicated in the etiology of ER-positive breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by posphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDA) ER as well as the phorphorylating activation of a truncated and nuclear-localized ER variant (.about.52 kDa).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(pathways in etiol. of cancer, and treatment methods)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 5 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2005:221605 USPATFULL Full-text
TITLE:	Chroman-derived anti-androgens for treatment of androgen-mediated disorders
INVENTOR(S):	Thompson, Todd A., Madison, WI, UNITED STATES Wilding, George, Verona, WI, UNITED STATES
PATENT ASSIGNEE(S):	Wisconsin Alumni Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2005192342	A1	20050901	
APPLICATION INFO.:	US 2004-789835	A1	20040227	(10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-450510P	20030227 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	GODFREY & KAHN, S.C., 780 N. WATER STREET, MILWAUKEE, WI, 53202, US
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	8 Drawing Page(s)
LINE COUNT:	1654

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

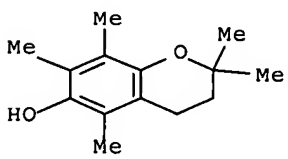
AB Methods for the prevention and/or alleviation of androgen-mediated disorders treatable by administering a chroman-derived anti-androgen compound are provided by the present invention. The invention further provides pharmaceutical and nutraceutical compositions containing chroman-derived anti-androgen compounds useful in the prevention and/or alleviation of androgen-mediated disorders, particularly prostate cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(chroman-derived antiandrogens for treatment of androgen-mediated disorders)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 6 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2004:300069 USPATFULL Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S):	Sanders, Bob G., Austin, TX, UNITED STATES Kline, Kimberly, Austin, TX, UNITED STATES Hurley, Laurence, Austin, TX, UNITED STATES Gardner, Robb, Austin, TX, UNITED STATES Menchaca, Marla, Austin, TX, UNITED STATES Yu, Weiping, Austin, TX, UNITED STATES Ramanan, Puthucode N., Austin, TX, UNITED STATES Liu, Shenquan, Austin, TX, UNITED STATES Israel, Karen, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S):	Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235938	A1	20041125
APPLICATION INFO.:	US 2003-644418	A1	20030820 (10)
RELATED APPLN. INFO.:	Division of Ser. No. US 2000-502592, filed on 11 Feb 2000, GRANTED, Pat. No. US 6770672 Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS:	30
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	21 Drawing Page(s)
LINE COUNT:	2556

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

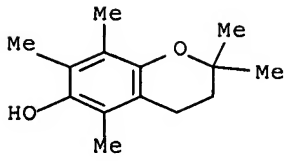
wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 7 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2004:192666 USPATFULL Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S):	Sanders, Bob G., Austin, TX, United States Kline, Kimberly, Austin, TX, United States Hurley, Laurence, Austin, TX, United States Gardner, Robb, Austin, TX, United States Menchaca, Marla, Austin, TX, United States Yu, Weiping, Austin, TX, United States Ramanan, Puthucode N., Austin, TX, United States Liu, Shenquan, Austin, TX, United States Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S):	Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6770672	B1	20040803
APPLICATION INFO.:	US 2000-502592		20000211 (9)
RELATED APPLN. INFO.:	Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, now patented, Pat. No. US 6417223, issued on 9 Jul 2002		

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101543P	19980923 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	GRANTED
PRIMARY EXAMINER:	Fonda, Kathleen K.
ASSISTANT EXAMINER:	Maier, Leigh C.
LEGAL REPRESENTATIVE:	Adler, Benjamin Aaron
NUMBER OF CLAIMS:	4
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	18 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT:	2359

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

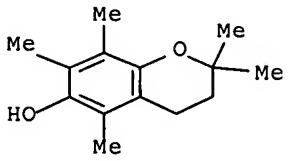
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol

(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 8 OF 11 USPATFULL on STN

ACCESSION NUMBER: 2004:127448 USPATFULL Full-text

TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof

INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES

PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004097431	A1	20040520
APPLICATION INFO.:	US 2003-695275	A1	20031028 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-8066, filed on 5 Nov 2001, GRANTED, Pat. No. US 6703384 Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility

FILE SEGMENT: APPLICATION

LEGAL REPRESENTATIVE: Benjamin Aaron Adler, Ph.D., J.D., Adler & Associates, 8011 Candle Lane, Houston, TX, 77071

NUMBER OF CLAIMS: 17

EXEMPLARY CLAIM: 1

NUMBER OF DRAWINGS: 11 Drawing Page(s)

LINE COUNT: 2605

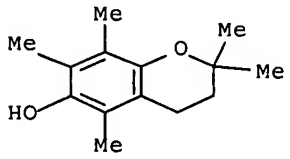
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for

inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 9 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2002:280579 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Hurley, Laurence, Austin, TX, UNITED STATES
Gardner, Robb, Austin, TX, UNITED STATES
Menchaca, Marla, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
Ramanan, Puthucode N., Austin, TX, UNITED STATES
Liu, Shenquan, Austin, TX, UNITED STATES
Israel, Karen, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002156024	A1	20021024
	US 6645998	B2	20031111
APPLICATION INFO.:	US 2002-122019	A1	20020412 (10)

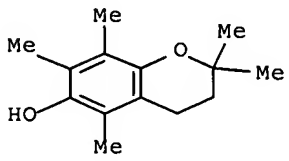
RELATED APPLN. INFO.: Division of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 2170
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 10 OF 11 USPATFULL on STN

ACCESSION NUMBER:	2002:199098 USPATFULL Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S):	Sanders, Bob G., Austin, TX, UNITED STATES Kline, Kimberly, Austin, TX, UNITED STATES Yu, Weiping, Austin, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002107207	A1	20020808
	US 6703384	B2	20040309
APPLICATION INFO.:	US 2001-8066	A1	20011105 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

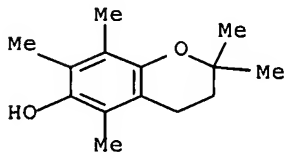
DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1

NUMBER OF DRAWINGS: 12 Drawing Page(s)
LINE COUNT: 2606
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L4 ANSWER 11 OF 11 USPATFULL on STN
ACCESSION NUMBER: 2002:168253 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses therof
INVENTOR(S): Sanders, Bob G., Austin, TX, United States
Kline, Kimberly, Austin, TX, United States
Hurley, Laurence, Austin, TX, United States
Gardner, Robb, Austin, TX, United States
Menchaca, Marla, Austin, TX, United States
Yu, Weiping, Austin, TX, United States
Ramanan, Puthucode N., Austin, TX, United States
Liu, Shenquan, Austin, TX, United States
Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 6417223	B1	20020709	
APPLICATION INFO.:	US 1999-404001		19990923	(9)

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)
DOCUMENT TYPE:	Utility	
FILE SEGMENT:	GRANTED	
PRIMARY EXAMINER:	Wilson, James O.	
ASSISTANT EXAMINER:	Maier, Leigh C.	
LEGAL REPRESENTATIVE:	Adler, Benjamin Aaron	
NUMBER OF CLAIMS:	3	
EXEMPLARY CLAIM:	1	
NUMBER OF DRAWINGS:	14 Drawing Figure(s); 14 Drawing Page(s)	
LINE COUNT:	1959	

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

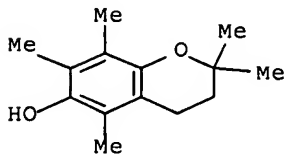
wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



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FILE 'REGISTRY' ENTERED AT 12:24:10 ON 27 AUG 2007

L1 STRUCTURE UPLOADED

L2 8 S L1 EXA FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:24:41 ON 27 AUG

2007
L3 511 S L2
L4 11 S L3 AND "PROSTATE CANCER"

=> **s l3 and "androgen-dependent"**
L5 1 L3 AND "ANDROGEN-DEPENDENT"

=> **d l5 ibib, abs, hitstr**

L5 ANSWER 1 OF 1 USPATFULL on STN

ACCESSION NUMBER:	2005:221605 USPATFULL Full-text		
TITLE:	Chroman-derived anti-androgens for treatment of androgen-mediated disorders		
INVENTOR(S):	Thompson, Todd A., Madison, WI, UNITED STATES Wilding, George, Verona, WI, UNITED STATES		
PATENT ASSIGNEE(S):	Wisconsin Alumni Research Foundation (U.S. corporation)		

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2005192342	A1	20050901
APPLICATION INFO.:	US 2004-789835	A1	20040227 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-450510P	20030227 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	GODFREY & KAHN, S.C., 780 N. WATER STREET, MILWAUKEE, WI, 53202, US
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	8 Drawing Page(s)
LINE COUNT:	1654

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

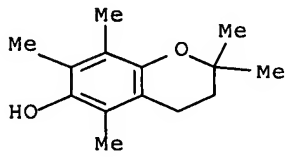
AB Methods for the prevention and/or alleviation of androgen-mediated disorders treatable by administering a chroman-derived anti-androgen compound are provided by the present invention. The invention further provides pharmaceutical and nutraceutical compositions containing chroman-derived anti-androgen compounds useful in the prevention and/or alleviation of androgen-mediated disorders, particularly prostate cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(chroman-derived antiandrogens for treatment of androgen-mediated disorders)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



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(FILE 'HOME' ENTERED AT 12:23:49 ON 27 AUG 2007)

FILE 'REGISTRY' ENTERED AT 12:24:10 ON 27 AUG 2007
L1 STRUCTURE UPLOADED
L2 8 S L1 EXA FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:24:41 ON 27 AUG 2007
L3 511 S L2
L4 11 S L3 AND "PROSTATE CANCER"
L5 1 S L3 AND "ANDROGEN-DEPENDENT"

=> **FIL REGISTRY**

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	0.45	151.53

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.56

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DICTIONARY FILE UPDATES: 26 AUG 2007 HIGHEST RN 945604-45-5

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=> S 950-99-2/RN

L6 1 950-99-2/RN

=> SET NOTICE 1 DISPLAY

NOTICE SET TO 1 U.S. DOLLAR FOR DISPLAY COMMAND
SET COMMAND COMPLETED

=> D L6 SQIDE 1-

YOU HAVE REQUESTED DATA FROM 1 ANSWERS - CONTINUE? Y/(N):y
THE ESTIMATED COST FOR THIS REQUEST IS 6.55 U.S. DOLLARS
DO YOU WANT TO CONTINUE WITH THIS REQUEST? (Y)/N:y

L6 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN
RN 950-99-2 REGISTRY
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN 6-Chromanol, 2,2,5,7,8-pentamethyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN α-C-1-Chromanol
CN 2,2,5,7,8-Pentamethyl-6-chromanol
CN 2,2,5,7,8-Pentamethyl-6-hydroxychroman
CN 6-Hydroxy-2,2,5,7,8-pentamethylchroman
CN Chroman C1
CN Chromane C1
CN Chromanol
CN NSC 226236
CN PMC
CN TMC 5
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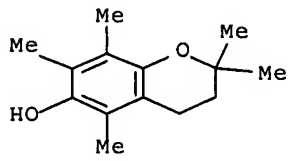
CI COM
LC STN Files: AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMINFORMRX, CHEMLIST, CSCHEM, DDFU, DRUGU, EMBASE, MEDLINE, RTECS*, SPECINFO, TOXCENTER, USPAT2, USPATFULL
(*File contains numerically searchable property data)
DT.CA CAplus document type: Conference; Journal; Patent; Report
RL.P Roles from patents: BIOL (Biological study); PREP (Preparation); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.P Roles for non-specific derivatives from patents: BIOL (Biological study); PREP (Preparation); USES (Uses)
RL.NP Roles from non-patents: ANST (Analytical study); BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); RACT (Reactant or reagent); USES (Uses); NORL (No role in record)
RLD.NP Roles for non-specific derivatives from non-patents: BIOL (Biological study); FORM (Formation, nonpreparative); PREP (Preparation); PROC (Process); PRP (Properties); USES (Uses)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

405 REFERENCES IN FILE CA (1907 TO DATE)
12 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
405 REFERENCES IN FILE CAPLUS (1907 TO DATE)
14 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

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NOTICE SET TO OFF FOR DISPLAY COMMAND
SET COMMAND COMPLETED

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=> **file medline caplus wpids uspatfull**

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	2.40	153.93

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS)	SINCE FILE ENTRY	TOTAL SESSION
CA SUBSCRIBER PRICE	0.00	-1.56

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=> **s l6**
'RN' IS NOT A VALID FIELD CODE
L7   510 L6

=> **s l7 and (cancer or tumor)**
L8   22 L7 AND (CANCER OR TUMOR)

=> **d l8 1-22 ibib, abs, hitstr**

L8   ANSWER 1 OF 22   MEDLINE on STN
ACCESSION NUMBER: 2003400986   MEDLINE Full-text
DOCUMENT NUMBER: PubMed ID: 12939470
TITLE: Androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells.
AUTHOR: Thompson Todd A; Wilding George
CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center, University of Wisconsin-Madison, Madison, Wisconsin 53792, USA.
SOURCE: Molecular cancer therapeutics, (2003 Aug) Vol. 2, No. 8, pp. 797-803.
Journal code: 101132535. ISSN: 1535-7163.
PUB. COUNTRY: United States
DOCUMENT TYPE: Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)
(RESEARCH SUPPORT, U.S. GOV'T, NON-P.H.S.)
LANGUAGE: English
FILE SEGMENT: Priority Journals
ENTRY MONTH: 200406
ENTRY DATE: Entered STN: 27 Aug 2003
Last Updated on STN: 24 Jun 2004

Entered Medline: 21 Jun 2004

AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC(50) of approximately 10 micro M against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, respectively, by 30 micro M PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

L8 ANSWER 2 OF 22 MEDLINE on STN

ACCESSION NUMBER: 95232770 MEDLINE Full-text

DOCUMENT NUMBER: PubMed ID: 7716769

TITLE: Phenoxyl radicals of etoposide (VP-16) can directly oxidize intracellular thiols: protective versus damaging effects of phenolic antioxidants.

AUTHOR: Tyurina Y Y; Tyurin V A; Yalowich J C; Quinn P J; Claycamp H G; Schor N F; Pitt B R; Kagan V E

CORPORATE SOURCE: Department of Environmental and Occupational Health, University of Pittsburgh, Pennsylvania 15238, USA.

SOURCE: Toxicology and applied pharmacology, (1995 Apr) Vol. 131, No. 2, pp. 277-88.
Journal code: 0416575. ISSN: 0041-008X.

PUB. COUNTRY: United States

DOCUMENT TYPE: (COMPARATIVE STUDY)
Journal; Article; (JOURNAL ARTICLE)
(RESEARCH SUPPORT, NON-U.S. GOV'T)

LANGUAGE: English

FILE SEGMENT: Priority Journals

ENTRY MONTH: 199505

ENTRY DATE: Entered STN: 24 May 1995
Last Updated on STN: 3 Feb 1997
Entered Medline: 18 May 1995

AB Phenolic compounds can act as radical scavengers due to their ability to donate a mobile hydrogen to peroxyl radicals producing a phenoxyl radical if the phenoxyl radical formed in the radical scavenging reaction efficiently interacts with vitally important biomolecules, then this interaction may result in cytotoxic effects rather than in antioxidant protection. In the present work we have chosen two model compounds--a phenolic antitumor drug, VP-16, known to be highly cytotoxic, and a homolog of vitamin E, 2,2,5,7,8-pentamethyl-6-hydroxychromane (PMC)--as typical representatives of phenoxyl radicals to study interactions of their phenoxyl radicals with intracellular thiols. Using a water-soluble source of peroxyl radicals, the azo-initiator 2,2'-azobis(2- aminodinopropane) (AAPH), we found that both PMC and VP-16 are very efficient scavengers of peroxyl radicals as evidenced by their ability to inhibit AAPH-induced chemiluminescence of luminol and oxidation of PnA

incorporated into DOPC liposomes. Both PMC and VP-16 were also able to protect against AAPH-induced oxidative degradation of DNA in nuclei from human leukemic K562 cells. In contrast, there was a dramatic difference in the ability of VP-16 and PMC to protect GSH against AAPH-induced oxidation: while PMC inhibited AAPH-induced oxidation of GSH in a concentration-dependent manner, VP-16 did not protect GSH against oxidation. We hypothesized that this was due to different reactivities of the phenoxyl radicals formed by AAPH-derived peroxyl radicals from VP-16 and PMC toward GSH. To substantiate this hypothesis, we compared interactions of the phenoxyl radicals generated from VP-16 and PMC with intracellular thiols in K562 cell homogenates. While the PMC phenoxyl radicals were only slightly affected by thiols, the VP-16 phenoxyl radicals were reduced by thiols. This is evidenced by (i) a significant inhibition of the tyrosinase-induced VP-16 consumption upon addition of K562 cell homogenates, (ii) a depletion of endogenous thiols in K562 cell homogenates induced by VP-16+tyrosinase, (iii) a transient disappearance of the VP-16 phenoxyl radical signal from the ESR spectra and its reappearance after depletion of endogenous thiols, and (iv) elimination of the lag period for the appearance of the VP-16 phenoxyl radical ESR signal subsequent to depletion of thiols by mersalyl acid. To evaluate the contribution of GSH and protein thiols to reduction of the VP-GSH-peroxidase + cumeme hydroperoxide to specifically deplete endogenous GSH.(ABSTRACT TRUNCATED AT 400 WORDS)

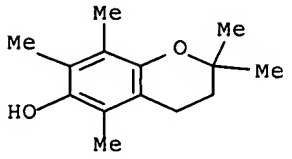
L8 ANSWER 3 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2006:101964 CAPLUS Full-text
DOCUMENT NUMBER: 144:184652
TITLE: Novel pathways in the etiology of cancer, and treatment methods
INVENTOR(S): Benz, Christopher C.
PATENT ASSIGNEE(S): Buck Institute for Age Research, USA
SOURCE: U.S. Pat. Appl. Publ., 49 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.		DATE
US 2006024691	A1	20060202	US 2005-90546		20050324
PRIORITY APPLN. INFO.:			US 2004-556774P	P	20040325
			US 2004-580534P	P	20040616
			US 2004-629691P	P	20041119

AB The invention pertains to the identification of two novel epithelial signaling pathways in ER-pos. breast cancers and the discovery that the cellular biol. and (likely also the clin. outcome) of ER-pos. breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF-κB activation and/or DNA binding is implicated in the etiol. of ER-pos. breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by phosphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDA) ER as well as the phorphorylating activation of a truncated and nuclear-localized ER variant (.apprx.52 kDa). Also disclosed are methods for identifying patients likely to respond to hormonal therapy and for selecting a therapeutic regimen for the treatment of cancer.

IT 950-99-2
RL: PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)

(pathways in etiol. of cancer, and treatment methods)
RN 950-99-2 CAPLUS
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 4 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2005:120717 CAPLUS Full-text
DOCUMENT NUMBER: 142:170094
TITLE: Chroman-derived antiandrogens for treatment of androgen-mediated disorders
INVENTOR(S): Thompson, Todd A.; Wilding, George
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
SOURCE: PCT Int. Appl., 69 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2005011658	A2	20050210	WO 2004-US5872	20040227
WO 2005011658	A3	20050519		
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW				
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AU 2004260631	A1	20050210	AU 2004-260631	20040227
CA 2517390	A1	20050210	CA 2004-2517390	20040227
US 2005192342	A1	20050901	US 2004-789835	20040227
EP 1596857	A2	20051123	EP 2004-785845	20040227
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR, BG, CZ, EE, HU, SK				

PRIORITY APPLN. INFO.: US 2003-450510P P 20030227
WO 2004-US5872 A 20040227

OTHER SOURCE(S): MARPAT 142:170094

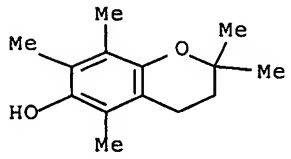
AB Methods for the prevention and/or alleviation of androgen-mediated disorders treatable by administering a chroman-derived antiandrogen compound are provided by the invention. The invention further provides pharmaceutical and nutraceutical compns. containing chroman-derived antiandrogen compds. useful in the prevention and/or alleviation of androgen-mediated disorders, particularly prostate cancer. Compds. of the invention include e.g. 2,2,5,7,8-pentamethyl-6-chromanol.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol

RL: ADV (Adverse effect, including toxicity); DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(chroman-derived antiandrogens for treatment of androgen-mediated disorders)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 5 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2004:618733 CAPLUS Full-text

DOCUMENT NUMBER: 141:174332

TITLE: Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for therapeutic use in the prevention and treatment of cancer

INVENTOR(S): Sanders, Bob G.; Kline, Kimberly; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PATENT ASSIGNEE(S): Research Development Foundation, USA

SOURCE: U.S., 48 pp., Cont.-in-part of U.S. Ser. No. 404,001.
CODEN: USXXAM

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 6770672	B1	20040803	US 2000-502592	20000211
US 6417223	B1	20020709	US 1999-404001	19990923
CA 2399802	A1	20010816	CA 2001-2399802	20010209
WO 2001058889	A1	20010816	WO 2001-US4168	20010209
W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
EP 1254130	A1	20021106	EP 2001-909008	20010209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR				
JP 2004504268	T	20040212	JP 2001-558439	20010209
NZ 520798	A	20040528	NZ 2001-520798	20010209
CN 1529701	A	20040915	CN 2001-807536	20010209
RU 2263672	C2	20051110	RU 2002-124135	20010209
US 2002107207	A1	20020808	US 2001-8066	20011105
US 6703384	B2	20040309		

US 2004235938	A1	20041125	US 2003-644418	20030820
US 2004097431	A1	20040520	US 2003-695275	20031028
PRIORITY APPLN. INFO.:			US 1998-101543P	P 19980923
			US 1999-404001	A2 19990923
			US 1998-101542P	P 19980923
			US 2000-502592	A 20000211
			WO 2001-US4168	W 20010209
			US 2001-8066	A3 20011105

OTHER SOURCE(S): MARPAT 141:174332

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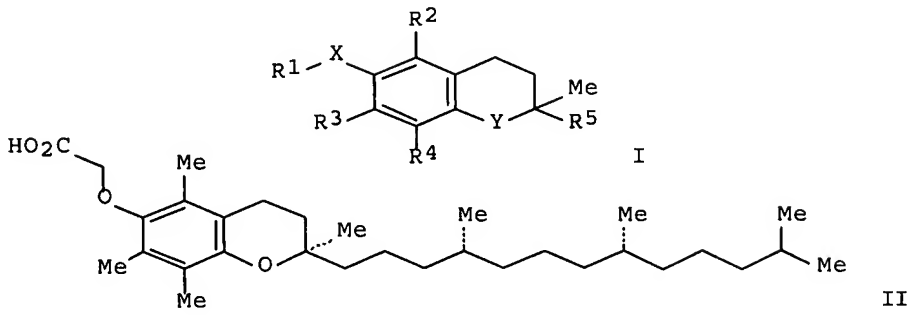


I

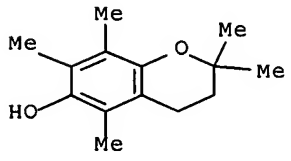
II

AB Chroman derivs., such as I [X = O, S, NR6; Y = O, NR6; R1 = carboxyalkyl, carboxyalkenyl, etc.; R2, R3, R4 = H, Me, alkyl, etc.; R5 = alkyl, alkenyl, etc.; R6 = H, alkyl], were prepared for use in antitumor pharmaceutical compns. for inducing apoptosis in a cell, particularly a cancer cell. Thus, α-tocopherol derivative II was prepared in 88% yield by a reaction of BrCH2CO2Me with (R,R,R)-α-tocopherol using NaOH in DMF. The prepared chromans were assayed for growth inhibitory and apoptotic activity against a variety of human cancer cell lines.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



REFERENCE COUNT: 15 THERE ARE 15 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 6 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2003:665773 CAPLUS Full-text

DOCUMENT NUMBER: 140:52950

TITLE: Androgen Antagonist Activity by the Antioxidant Moiety of Vitamin E, 2,2,5,7,8-Pentamethyl-6-chromanol in Human Prostate Carcinoma Cells

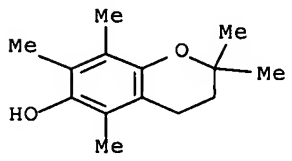
AUTHOR(S): Thompson, Todd A.; Wilding, George
CORPORATE SOURCE: University of Wisconsin Comprehensive Cancer Center and University of Wisconsin Department of Medicine, University of Wisconsin-Madison, Madison, WI, 53792, USA

SOURCE: Molecular Cancer Therapeutics (2003), 2(8), 797-803
CODEN: MCTOCF; ISSN: 1535-7163
PUBLISHER: American Association for Cancer Research
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Antioxidants, such as vitamin E, are being investigated for efficacy in prostate cancer prevention. In this study, we show that the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol (PMCol), has antiandrogen activity in prostate carcinoma cells. In the presence of PMCol, the androgen-stimulated biphasic growth curve of LNCaP human prostate carcinoma cells was shifted to the right. The PMCol-induced growth shift was similar to that produced by treatment with the pure antiandrogen bicalutamide (i.e., Casodex), indicative of androgen receptor (AR) antagonist activity. The concentration of PMCol used was below the concentration required to affect cell growth or viability in the absence of androgen. Using an AR binding competition assay, PMCol was found to be a potent antiandrogen in both LNCaP and LAPC4 cells, with an IC50 of approx. 10 μM against 1 nM R1881 (methyltrienolone; a stable, synthetic androgen). Prostate-specific antigen release from LNCaP cells produced by androgen exposure with either 0.05 or 1.0 nM R1881 was inhibited 100% and 80%, resp., by 30 μM PMCol. Also, PMCol inhibited androgen-induced promoter activation in both LNCaP and LAPC4 cells. However, PMCol did not affect AR protein levels, suggesting that the inhibitory effects of PMCol on androgenic pathways were not due to decreased expression of the AR. Therefore, growth modulation by the antioxidant moiety of vitamin E in androgen-sensitive prostate carcinoma cells is due, at least in part, to its potent antiandrogenic activity.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: DMA (Drug mechanism of action); PAC (Pharmacological activity); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(androgen antagonist activity by the antioxidant moiety of vitamin E, 2,2,5,7,8-pentamethyl-6-chromanol in human prostate carcinoma cells)

RN 950-99-2 CAPLUS
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



REFERENCE COUNT: 31 THERE ARE 31 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 7 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2002:595501 CAPLUS Full-text
DOCUMENT NUMBER: 137:140656
TITLE: Preparation of tocopherols, tocotrienols, other

chromans and side chain derivs. as potential antiproliferative and proapoptotic agents

INVENTOR(S): Sanders, Bob G.; Kline, Kimberly; Yu, Weiping

PATENT ASSIGNEE(S): Research Development Foundation, USA

SOURCE: U.S. Pat. Appl. Publ., 44 pp., Cont.-in-part of U. S. Ser. No. 502,592.
CODEN: USXXCO

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2002107207	A1	20020808	US 2001-8066	20011105
US 6703384	B2	20040309		
US 6417223	B1	20020709	US 1999-404001	19990923
CN 1706838	A	20051214	CN 2005-10003855	19990923
US 6770672	B1	20040803	US 2000-502592	20000211
US 2002156024	A1	20021024	US 2002-122019	20020412
US 6645998	B2	20031111		
WO 2003039461	A2	20030515	WO 2002-US35147	20021101
WO 2003039461	A3	20031113		
W: AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU, TJ, TM, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG				
AU 2002353971	A1	20030519	AU 2002-353971	20021101
US 2004097431	A1	20040520	US 2003-695275	20031028

PRIORITY APPLN. INFO.:

US 1998-101542P	P	19980923
US 1999-404001	A2	19990923
US 2000-502592	A2	20000211
US 1998-101543P	P	19980923
CN 1999-812829	A3	19990923
US 2001-8066	A	20011105
WO 2002-US35147	W	20021101

OTHER SOURCE(S): MARPAT 137:140656

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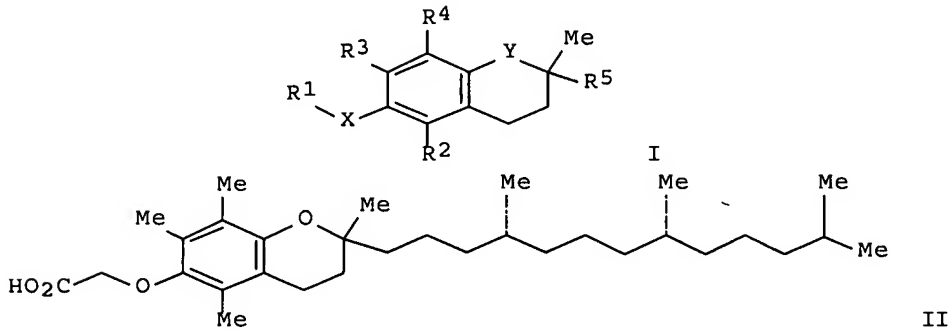
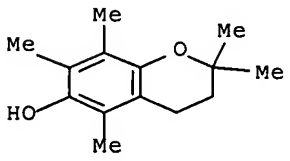


AB Derivs. of tocopherol, tocotrienol and other chromans of formula I (X and Y independently are oxygen, nitrogen or sulfur; when Y is nitrogen, nitrogen is substituted with R6 and R6 = H or Me; R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiol ester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alc., ethers or nitrites; R2, R3 = hydrogen or R4; R4 = Me, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzyl ester, saccharide or amine; and R5 = alkenyl) were prepared as antiproliferative and proapoptotic agents for the potential treatment of cell proliferative diseases. Thus, α-tocopherol was treated with Me bromoacetate and NaOH in N, N-dimethylformamide to give II. II showed effective growth inhibitory properties (apoptotic inducing) in a wide variety of human cancer cell lines, including breast, prostate, cervical, and ovarian cancers with EC50 values ranging from 1-20 μg/mL.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the treatment of cancer)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 8 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 2001:597976 CAPLUS Full-text

DOCUMENT NUMBER: 135:166941

TITLE: Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives that induce cell apoptosis for therapeutic use as antiproliferative agents

INVENTOR(S): Sanders, Robert G.; Kline, Kimberly; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen

PATENT ASSIGNEE(S): Research Development Foundation, USA

SOURCE: PCT Int. Appl., 120 pp.
CODEN: PIXXD2

DOCUMENT TYPE: Patent

LANGUAGE: English

FAMILY ACC. NUM. COUNT: 4

PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2001058889	A1	20010816	WO 2001-US4168	20010209

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT,

LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NO, NZ, PL, PT, RO, RU,
SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, UZ, VN, YU,
ZA, ZW
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY,
DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, TR, BF,
BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG

US 6770672	B1	20040803	US 2000-502592		20000211
CA 2399802	A1	20010816	CA 2001-2399802		20010209
EP 1254130	A1	20021106	EP 2001-909008		20010209
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO, MK, CY, AL, TR					
JP 2004504268	T	20040212	JP 2001-558439		20010209
NZ 520798	A	20040528	NZ 2001-520798		20010209
RU 2263672	C2	20051110	RU 2002-124135		20010209
PRIORITY APPLN. INFO.:			US 2000-502592	A	20000211
			US 1998-101543P	P	19980923
			US 1999-404001	A2	19990923
			WO 2001-US4168	W	20010209

OTHER SOURCE(S): MARPAT 135:166941
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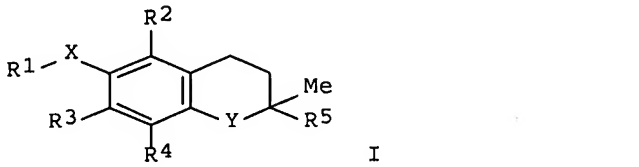

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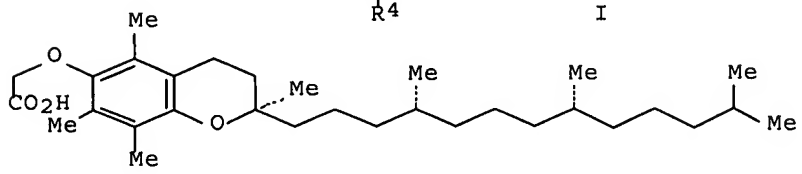


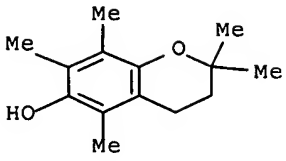
II

AB Tocopherol analogs, such as I [X = O, NH, S; Y = O, NH, S; R1 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, carboxamide, thiocarboxyl, etc.; R2, R3, R4 = H, Me, benzyl, carboxyl, carboxamide, amine, saccharide; R5 = alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, carboxamide], were prepared for pharmaceutical use as antiproliferative agents which induce cell apoptosis for treatment of cancers and diseases involving cell proliferation, such as autoimmune diseases, psoriasis, etc.. Thus, (R,R,R)-α-tocopherol derivative II was prepared in 88% yield by condensation of (R,R,R)-α-tocopherol and BrCH2CO2Me in DMF using NaOH followed by hydrolysis with 5 N HCl. The prepared tocopherol analogs were tested for their ability to induce apoptosis in a number of cancer cell lines, such as breast, cervical, colon, prostate, etc.

IT 950-99-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chromans that induce cell apoptosis for therapeutic use as antiproliferative agents)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)

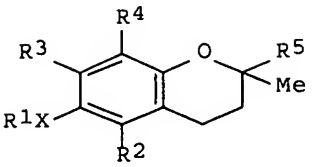


REFERENCE COUNT: 9 THERE ARE 9 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 9 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 2000:209907 CAPLUS Full-text
DOCUMENT NUMBER: 132:237223
TITLE: Preparation of tocopherols, tocotrienols, other chroman and side chain derivatives for use as antitumor agents and for inducing cell apoptosis
INVENTOR(S): Kline, Kimberly; Sanders, Bob G.; Hurley, Laurence; Gardner, Robb; Menchaca, Marla; Yu, Weiping; Ramanan, Puthucode N.; Liu, Shenquan; Israel, Karen
PATENT ASSIGNEE(S): Research Development Foundation, USA
SOURCE: PCT Int. Appl., 101 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 4
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2000016772	A1	20000330	WO 1999-US21778	19990923
W: AE, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CU, CZ, DE, DK, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, UA, UG, UZ, VN, YU, ZA, ZW				
RW: GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW, AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG				
CA 2345079	A1	20000330	CA 1999-2345079	19990923
AU 9961553	A1	20000410	AU 1999-61553	19990923
AU 757013	B2	20030130		
EP 1115398	A1	20010718	EP 1999-948352	19990923
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI, LT, LV, FI, RO				
CN 1325303	A	20011205	CN 1999-812829	19990923
JP 2002526446	T	20020820	JP 2000-573733	19990923
NZ 510732	A	20040130	NZ 1999-510732	19990923
RU 2232758	C2	20040720	RU 2001-111019	19990923
CN 1706838	A	20051214	CN 2005-10003855	19990923
IL 142082	A	20051218	IL 1999-142082	19990923
TW 592695	B	20040621	TW 1999-88120073	19991117
ZA 2001002057	A	20020319	ZA 2001-2057	20010313
PRIORITY APPLN. INFO.:			US 1998-101542P P	19980923
			CN 1999-812829 A3	19990923
			WO 1999-US21778 W	19990923

OTHER SOURCE(S): MARPAT 132:237223
GI



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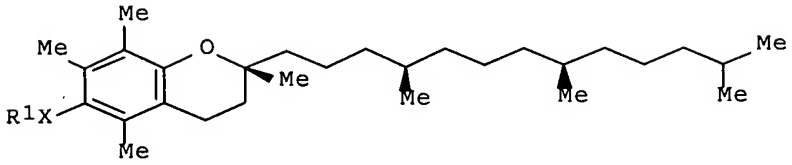


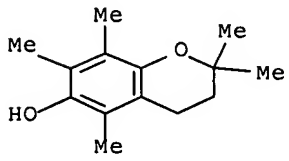
II

AB Chromans I [R1 = alkyl, alkenyl, alkynyl, aryl, herteroaryl, carboxyl, carboxamide, thioamide, saccharide, amine, sulfate, phosphate, etc.; R2, R3, R4 = H, Me, benzylcarboxylate, saccharide, amino, etc.; R5 = alkyl, alkenyl, alkynyl, aryl, herteroaryl, carboxyl, carboxamide; X = O, NH, S] were prepared for pharmaceutical use as antitumor agents and cell apoptosis inducing agents. Thus, tocopherol derivative II (R1 = CH2CO2H, X = O) was prepared in 88% yield via O-alkylation of (+)-α-tocopherol with Me bromoacetate. The prepared chromans were tested for cell apoptosis activity against a variety of cancer cell lines.

IT 950-99-2
RL: RCT (Reactant); RACT (Reactant or reagent)
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)

RN 950-99-2 CAPLUS

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



REFERENCE COUNT: 3 THERE ARE 3 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 10 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN

ACCESSION NUMBER: 1999:602318 CAPLUS Full-text

DOCUMENT NUMBER: 131:295249

TITLE: Mechanism-based chemopreventive strategies against etoposide-induced acute myeloid leukemia: free radical/antioxidant approach

AUTHOR(S): Kagan, Valerian E.; Yalowich, Jack C.; Borisenko, Grigory G.; Tyurina, Yulia Y.; Tyurin, Vladimir A.; Thampatty, Padmakumari; Fabisiak, James P.

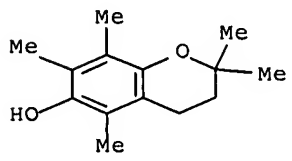
CORPORATE SOURCE: Departments of Environmental and Occupational Health and Pharmacology and University of Pittsburgh Cancer Institute, University of Pittsburgh, Pittsburgh, PA, USA

SOURCE: Molecular Pharmacology (1999), 56(3), 494-506
CODEN: MOPMA3; ISSN: 0026-895X
PUBLISHER: American Society for Pharmacology and Experimental Therapeutics
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Etoposide (VP-16) is extensively used to treat cancer, yet its efficacy is calamitously associated with an increased risk of secondary acute myelogenous leukemia. The mechanisms for the extremely high susceptibility of myeloid stem cells to the leukemogenic effects of etoposide have not been elucidated. We propose a mechanism to account for the etoposide-induced secondary acute myelogenous leukemia and nutritional strategies to prevent this complication of etoposide therapy. We hypothesize that etoposide phenoxyl radicals (etoposide-O) formed from etoposide by myeloperoxidase are responsible for its genotoxic effects in bone marrow progenitor cells, which contain constitutively high myeloperoxidase activity. Here, we used purified human myeloperoxidase, as well as human leukemia HL60 cells with high myeloperoxidase activity and provide evidence of the following. 1. Etoposide undergoes one-electron oxidation to etoposide-O· catalyzed by both purified myeloperoxidase and myeloperoxidase activity in HL60 cells; formation of etoposide-O·radicals is completely blocked by myeloperoxidase inhibitors, cyanide and azide. 2. Intracellular reductants, GSH and protein sulfhydryls (but not phospholipids), are involved in myeloperoxidase-catalyzed etoposide redox-cycling that oxidizes endogenous thiols; pretreatment of HL60 cells with a maleimide thiol reagent, ThioGlo1, prevents redox-cycling of etoposide-O· radicals and permits their direct ESR detection in cell homogenates. VP-16 redox-cycling by purified myeloperoxidase (in the presence of GSH) or by myeloperoxidase activity in HL60 cells is accompanied by generation of thiyl radicals, GS·, determined by HPLC assay of 5,5-dimethyl-1- pyrroline glytathionyl N-oxide glytathionyl nitrone adducts. 3. Ascorbate directly reduces etoposide-O·, thus competitively inhibiting etoposide-O·-induced thiol oxidation Ascorbate also diminishes etoposide-induced topo II-DNA complex formation in myeloperoxidase-rich HL60 cells (but not in HL60 cells with myeloperoxidase activity depleted by pretreatment with succinyl acetone). 4. A vitamin E homolog, 2,2,5,7,8-pentamethyl-6-hydroxychromane, a hindered phenolic compound whose phenoxyl radicals do not oxidize endogenous thiols, effectively competes with etoposide as a substrate for myeloperoxidase, thus preventing etoposide-O·-induced redox-cycling. We conclude that nutritional antioxidant strategies can be targeted at minimizing etoposide conversion to etoposide-O·, thus minimizing the genotoxic effects of the radicals in bone marrow myelogenous progenitor cells, i.e., chemoprevention of etoposide-induced acute myelogenous leukemia.

IT 950-99-2
RL: BAC (Biological activity or effector, except adverse); BSU (Biological study, unclassified); THU (Therapeutic use); BIOL (Biological study); USES (Uses)
(mechanism-based chemopreventive strategies against etoposide-induced acute myeloid leukemia: free radical/antioxidant approach)

RN 950-99-2 CAPLUS
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)

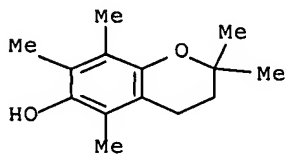


REFERENCE COUNT: 42 THERE ARE 42 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L8 ANSWER 11 OF 22 CAPLUS COPYRIGHT 2007 ACS on STN
ACCESSION NUMBER: 1993:440374 CAPLUS Full-text
DOCUMENT NUMBER: 119:40374
TITLE: Inhibition of NF-κB activation by vitamin E derivatives
AUTHOR(S): Suzuki, Yuichiro J.; Packer, Lester
CORPORATE SOURCE: Dep. Mol. Cell Biol., Univ. California, Berkeley, CA, 94720, USA
SOURCE: Biochemical and Biophysical Research Communications (1993), 193(1), 277-83
CODEN: BBRCA9; ISSN: 0006-291X
DOCUMENT TYPE: Journal
LANGUAGE: English

AB Nuclear factor κB (NF-κB) is believed to play an important role in the activation of a human immunodeficiency virus (HIV) which causes acquired immunodeficiency syndrome (AIDS). Recent findings suggesting an involvement of reactive oxygen species in signal transduction pathways leading to NF-κB activation have ensured the possible clin. use of antioxidants in blocking HIV activation. The present study examined the effects of vitamin E derivs. on the tumor necrosis factor-α (TNF-α)-induced NF-κB activation. Incubation of human Jurkat T cells with vitamin E acetate or α-tocopheryl succinate (10 μM to 1 mM) exhibited a concentration-dependent inhibition of NK-κB activation. α-Tocopherol or succinate at these concns. had no apparent effects. 2,2,5,7,8-Pentamethyl-6-hydroxychromane (PMC) was extremely effective, causing complete inhibition of NK-κB activation at 10 μM. Oct-1 binding activity was inactivated by α-tocopheryl succinate whereas other derivs. had no effects, suggesting that the effects of α-tocopheryl succinate are not specific to NF-κB. HPLC measurements demonstrated that treatment of cells with TNF-α had no effects on cellular α-tocopherol, but vitamin E acetate treatment increased the α-tocopherol content. Cell viability was not affected by any of the vitamin E derivs. These results indicate a possible use of vitamin E derivs. in AIDS therapeutics.

IT 950-99-2
RL: BIOL (Biological study)
(TNF-α-induced nuclear factor κB activation inhibition by, AIDS therapy in relation to)
RN 950-99-2 CAPLUS
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 12 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2006:289167 USPATFULL Full-text
TITLE: Use of active ingredients for the prophylaxis and/or

therapy of viral diseases

INVENTOR(S): Planz, Oliver, Wendelsheimer Strasse 34, Rottenburg, GERMANY, FEDERAL REPUBLIC OF 72108
Pleschka, Stephan, Giessen, GERMANY, FEDERAL REPUBLIC OF
Sedlacek, Hans-Harald, Marburg, GERMANY, FEDERAL REPUBLIC OF
Ludwig, Stephan, Wurzeburg, GERMANY, FEDERAL REPUBLIC OF
PATENT ASSIGNEE(S): Inamed GmbH Institut Fur Aerosolmedizin, Gemunden, GERMANY, FEDERAL REPUBLIC OF, D-35285 (non-U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006247161	A1	20061102	
APPLICATION INFO.:	US 2004-541633	A1	20040102	(10)
	WO 2004-DE12		20040102	
			20060630	PCT 371 date

	NUMBER	DATE
PRIORITY INFORMATION:	DE 2003-10300222	20030103

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: MAYER & WILLIAMS PC, 251 NORTH AVENUE WEST, 2ND FLOOR, WESTFIELD, NJ, 07090, US
NUMBER OF CLAIMS: 15
EXEMPLARY CLAIM: 1
LINE COUNT: 781

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

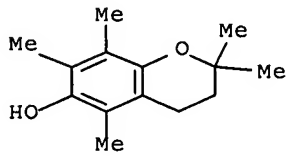
AB The invention relates to the use preferably of at least one active ingredient for the prophylaxis and/or therapy of a viral disease, wherein this active ingredient inhibits at least one component of the cellular signal transduction pathway for the activation of the transcription factor NF-kB such that the virus multiplication is inhibited. The present invention relates furthermore to the local, preferably aerogenic administration of the active ingredient according to the invention for inhibiting a virus multiplication. The active ingredient according to the invention may be combined with at least one further antivirally effective substance for the prophylaxis and/or therapy of a viral disease.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2
(inhibitor of component of signal transduction for activation of NF-kB for prophylaxisnd/or therapy of virus diseases)

RN 950-99-2 USPATFULL

CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



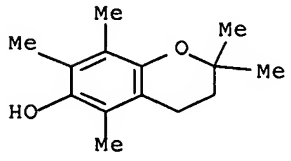
L8 ANSWER 13 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2006:227433 USPATFULL Full-text
TITLE: Chroman derivatives as lipoxygenase inhibitors
INVENTOR(S): Zhang, Wei, Santa Clara, CA, UNITED STATES
Chen, Jian, San Jose, CA, UNITED STATES
Boddupalli, Sekhar, San Jose, CA, UNITED STATES
PATENT ASSIGNEE(S): Galileo Pharmaceuticals, Inc (U.S. corporation)

	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006193797	A1	20060831	
APPLICATION INFO.:	US 2006-349813	A1	20060207	(11)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2005-656644P	20050225	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: FOLEY & LARDNER LLP, 1530 PAGE MILL ROAD, PALO ALTO, CA, 94304, US
NUMBER OF CLAIMS: 48
EXEMPLARY CLAIM: 1
LINE COUNT: 2649
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention is concerned with certain novel derivatives of Formula I: ##STR1## wherein X and R.sup.1 to R.sup.10 are as described in the specification, and where either R.sup.5 is OH, --NR.sup.dOR.sup.a or --NR.sup.d--NR.sup.bR.sup.c, or R.sup.7 is --NR.sup.dOR.sup.a or --NR.sup.d--NR.sup.bR.sup.c, or C.dbd.R.sup.7R.sup.8 is C.dbd.NOR.sup.a or C.dbd.N--NR.sup.bR.sup.c, which may be useful in the manufacture of pharmaceutical compositions for treating disorders mediated by lipoxygenases. They may also be useful in the manufacture of skin care and/or pharmaceutical compositions for the treatment of lipoxygenase mediated disorders.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethylchroman-6-ol
(skin care and pharmaceutical compns. comprising chroman derivs. as lipoxygenase inhibitors)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 14 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2006:27860 USPATFULL Full-text
TITLE: Novel pathways in the etiology of cancer
INVENTOR(S): Benz, Christopher C., Novato, CA, UNITED STATES
PATENT ASSIGNEE(S): Buck Institute for Age Research (U.S. corporation)

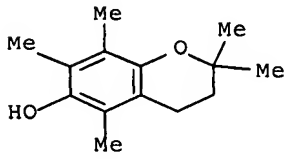
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 2006024691	A1	20060202	
APPLICATION INFO.:	US 2005-90546	A1	20050324	(11)

	NUMBER	DATE	
PRIORITY INFORMATION:	US 2004-556774P	20040325	(60)
	US 2004-580534P	20040616	(60)
	US 2004-629691P	20041119	(60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: QUINE INTELLECTUAL PROPERTY LAW GROUP, P.C., P O BOX 458, ALAMEDA, CA, 94501, US
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 19 Drawing Page(s)
LINE COUNT: 2824
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB This invention pertains to the identification of two novel epithelial signaling pathways in ER-positive breast cancer s and the discovery that the cellular biology and (likely also the clinical outcome) of ER-positive breast cancer cells is unexpectedly altered when these signaling pathways are activated. The first pathway pertains to the discovery that NF-κB activation and/or DNA binding is implicated in the etiology of ER-positive breast (and other) cancers. The second pathway involves ligand-independent quinine-mediated ER activation by posphorylation (e.g. on SER-118 and SER-167 residues of ER) and nuclear translocation of full-length (67 kDA) ER as well as the phorphorylating activation of a truncated and nuclear-localized ER variant (.about.52 kDa).

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(pathways in etiol. of cancer, and treatment methods)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 15 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2005:221605 USPATFULL Full-text
TITLE: Chroman-derived anti-androgens for treatment of androgen-mediated disorders
INVENTOR(S): Thompson, Todd A., Madison, WI, UNITED STATES
Wilding, George, Verona, WI, UNITED STATES
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation (U.S. corporation)

	NUMBER	KIND	DATE

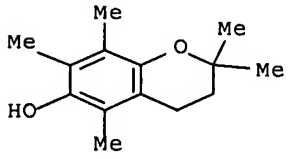
PATENT INFORMATION: US 2005192342 A1 20050901
APPLICATION INFO.: US 2004-789835 A1 20040227 (10)

	NUMBER	DATE
PRIORITY INFORMATION:	US 2003-450510P	20030227 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: GODFREY & KAHN, S.C., 780 N. WATER STREET, MILWAUKEE, WI, 53202, US
NUMBER OF CLAIMS: 24
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 8 Drawing Page(s)
LINE COUNT: 1654
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB Methods for the prevention and/or alleviation of androgen-mediated disorders treatable by administering a chroman-derived anti-androgen compound are provided by the present invention. The invention further provides pharmaceutical and nutraceutical compositions containing chroman-derived anti-androgen compounds useful in the prevention and/or alleviation of androgen-mediated disorders, particularly prostate cancer.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(chroman-derived antiandrogens for treatment of androgen-mediated disorders)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 16 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2004:300069 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Hurley, Laurence, Austin, TX, UNITED STATES
Gardner, Robb, Austin, TX, UNITED STATES
Menchaca, Marla, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
Ramanan, Puthucode N., Austin, TX, UNITED STATES
Liu, Shenquan, Austin, TX, UNITED STATES
Israel, Karen, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004235938	A1	20041125
APPLICATION INFO.:	US 2003-644418	A1	20030820 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2000-502592, filed on 11 Feb 2000, GRANTED, Pat. No. US 6770672 Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

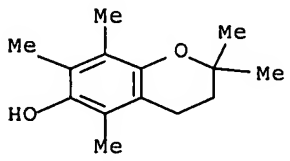
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 30
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 21 Drawing Page(s)
LINE COUNT: 2556
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 17 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2004:192666 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, United States
Kline, Kimberly, Austin, TX, United States
Hurley, Laurence, Austin, TX, United States
Gardner, Robb, Austin, TX, United States
Menchaca, Marla, Austin, TX, United States
Yu, Weiping, Austin, TX, United States
Ramanan, Puthucode N., Austin, TX, United States
Liu, Shenquan, Austin, TX, United States
Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV,

United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6770672	B1	20040803
APPLICATION INFO.:	US 2000-502592		20000211 (9)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, now patented, Pat. No. US 6417223, issued on 9 Jul 2002

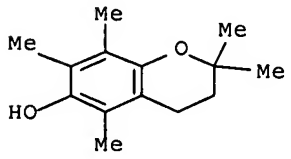
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101543P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Fonda, Kathleen K.
ASSISTANT EXAMINER: Maier, Leigh C.
LEGAL REPRESENTATIVE: Adler, Benjamin Aaron
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 18 Drawing Figure(s); 21 Drawing Page(s)
LINE COUNT: 2359
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; Y is selected from the group consisting of oxygen, nitrogen and sulfur wherein when Y is oxygen or nitrogen, n is 1 and when Y is sulfur, n is 0. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for therapeutic use in prevention and treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 18 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2004:127448 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2004097431	A1	20040520
APPLICATION INFO.:	US 2003-695275	A1	20031028 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 2001-8066, filed on 5 Nov 2001, GRANTED, Pat. No. US 6703384 Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

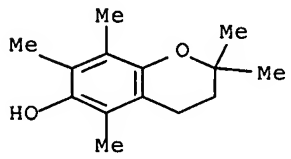
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, Ph.D., J.D., Adler & Associates, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 17
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 11 Drawing Page(s)
LINE COUNT: 2605
CAS INDEXING IS AVAILABLE FOR THIS PATENT.

AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 19 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2002:280579 USPATFULL Full-text

TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof

INVENTOR(S): Sanders, Bob G., Austin, TX, UNITED STATES
Kline, Kimberly, Austin, TX, UNITED STATES
Hurley, Laurence, Austin, TX, UNITED STATES
Gardner, Robb, Austin, TX, UNITED STATES
Menchaca, Marla, Austin, TX, UNITED STATES
Yu, Weiping, Austin, TX, UNITED STATES
Ramanan, Puthucode N., Austin, TX, UNITED STATES
Liu, Shenquan, Austin, TX, UNITED STATES
Israel, Karen, Austin, TX, UNITED STATES
PATENT ASSIGNEE(S): Research Development Foundation (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002156024	A1	20021024
	US 6645998	B2	20031111
APPLICATION INFO.:	US 2002-122019	A1	20020412 (10)

RELATED APPLN. INFO.: Division of Ser. No. US 1999-404001, filed on 23 Sep 1999, GRANTED, Pat. No. US 6417223

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: APPLICATION
LEGAL REPRESENTATIVE: Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS: 20
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Page(s)
LINE COUNT: 2170

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

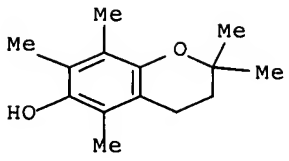
AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)

RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 20 OF 22 USPATFULL on STN

ACCESSION NUMBER:	2002:199098 USPATFULL Full-text
TITLE:	Tocopherols, tocotrienols, other chroman and side chain derivatives and uses thereof
INVENTOR(S):	Sanders, Bob G., Austin, TX, UNITED STATES Kline, Kimberly, Austin, TX, UNITED STATES Yu, Weiping, Austin, TX, UNITED STATES

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 2002107207	A1	20020808
	US 6703384	B2	20040309
APPLICATION INFO.:	US 2001-8066	A1	20011105 (10)

RELATED APPLN. INFO.: Continuation-in-part of Ser. No. US 2000-502592, filed on 11 Feb 2000, PENDING Continuation-in-part of Ser. No. US 1999-404001, filed on 23 Sep 1999, PENDING

	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE:	Utility
FILE SEGMENT:	APPLICATION
LEGAL REPRESENTATIVE:	Benjamin Aaron Adler, ADLER & ASSOCIATES, 8011 Candle Lane, Houston, TX, 77071
NUMBER OF CLAIMS:	24
EXEMPLARY CLAIM:	1
NUMBER OF DRAWINGS:	12 Drawing Page(s)
LINE COUNT:	2606

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

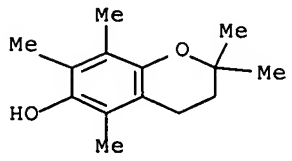
AB The present invention provides an antiproliferative compound having a structural formula ##STR1##

where X and Y independently are oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers or nitrites; R.sup.2 and R.sup.3 are hydrogen or R.sup.4; R.sup.4 is methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide or amine; and R.sup.5 is alkenyl; where when Y is nitrogen, said nitrogen is substituted with R.sup.6, wherein R.sup.6 is hydrogen or methyl. Also provided are methods for treating a cell proliferative disease and for inducing apoptosis in a cell comprising administering this compound is also provided.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.

IT 950-99-2, 2,2,5,7,8-Pentamethyl-6-chromanol
(preparation of tocopherols, tocotrienols, other chromans and side chain derivs. as potential antiproliferative, proapoptotic agents for the

treatment of cancer)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 21 OF 22 USPATFULL on STN
ACCESSION NUMBER: 2002:168253 USPATFULL Full-text
TITLE: Tocopherols, tocotrienols, other chroman and side chain derivatives and uses therof
INVENTOR(S): Sanders, Bob G., Austin, TX, United States
Kline, Kimberly, Austin, TX, United States
Hurley, Laurence, Austin, TX, United States
Gardner, Robb, Austin, TX, United States
Menchaca, Marla, Austin, TX, United States
Yu, Weiping, Austin, TX, United States
Ramanan, Puthucode N., Austin, TX, United States
Liu, Shenquan, Austin, TX, United States
Israel, Karen, Austin, TX, United States
PATENT ASSIGNEE(S): Research Development Foundation, Carson City, NV, United States (U.S. corporation)

	NUMBER	KIND	DATE
PATENT INFORMATION:	US 6417223	B1	20020709
APPLICATION INFO.:	US 1999-404001		19990923 (9)

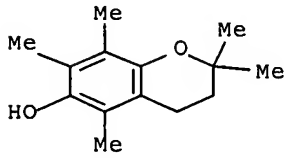
	NUMBER	DATE
PRIORITY INFORMATION:	US 1998-101542P	19980923 (60)

DOCUMENT TYPE: Utility
FILE SEGMENT: GRANTED
PRIMARY EXAMINER: Wilson, James O.
ASSISTANT EXAMINER: Maier, Leigh C.
LEGAL REPRESENTATIVE: Adler, Benjamin Aaron
NUMBER OF CLAIMS: 3
EXEMPLARY CLAIM: 1
NUMBER OF DRAWINGS: 14 Drawing Figure(s); 14 Drawing Page(s)
LINE COUNT: 1959
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB The present invention provides an antiproliferative compound having the structural formula ##STR1##

wherein X is oxygen, nitrogen or sulfur; R.sup.1 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxylic acid, carboxylate, carboxamide, ester, thioamide, thiolacid, thiolester, saccharide, alkoxy-linked saccharide, amine, sulfonate, sulfate, phosphate, alcohol, ethers and nitriles; R.sup.2 is hydrogen, methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.3 is selected from the group consisting of hydrogen, methyl, benzyl carboxylic acid, benzyl

carboxylate, benzyl carboxamide, benzylester, saccharide and amine; R.sup.4 is of methyl, benzyl carboxylic acid, benzyl carboxylate, benzyl carboxamide, benzylester, saccharide and amine; and R.sup.5 is alkyl, alkenyl, alkynyl, aryl, heteroaryl, carboxyl, amide and ester. Also provided is a method for inducing apoptosis in a cell comprising administering a composition comprising a compound.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2
(preparation of tocopherols, tocotrienols, other chroman and side chain derivs. for use as antitumor agents and for inducing cell apoptosis)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



L8 ANSWER 22 OF 22 USPATFULL on STN
ACCESSION NUMBER: 92:55640 USPATFULL Full-text
TITLE: Oxidized diphenylheteroalkanes
INVENTOR(S): Janssen, Bernd, Ludwigshafen, Germany, Federal Republic of
Wuest, Hans-Heiner, Dossenheim, Germany, Federal Republic of
PATENT ASSIGNEE(S): BASF Aktiengesellschaft, Ludwigshafen, Germany, Federal Republic of (non-U.S. corporation)

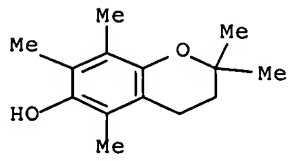
	NUMBER	KIND	DATE	
PATENT INFORMATION:	US 5128479		19920707	
APPLICATION INFO.:	US 1990-471886		19900129	(7)

	NUMBER	DATE
PRIORITY INFORMATION:	DE 1989-3903988	19890210

DOCUMENT TYPE: Utility
FILE SEGMENT: Granted
PRIMARY EXAMINER: Raymond, Richard L.
LEGAL REPRESENTATIVE: Oblon, Spivak, McClelland, Maier & Neustadt
NUMBER OF CLAIMS: 4
EXEMPLARY CLAIM: 1
LINE COUNT: 1176
CAS INDEXING IS AVAILABLE FOR THIS PATENT.
AB Oxidized diphenylheteroalkanes of the formula I ##STR1## where R.sup.1 to R.sup.6 and A have the meanings specified in the description, and the preparation thereof are described. The substances are suitable for controlling diseases and as cosmetic agents.

CAS INDEXING IS AVAILABLE FOR THIS PATENT.
IT 950-99-2P, 2,2,5,7,8-Pentamethylchroman-6-ol

(preparation and reaction of, in preparation of drugs)
RN 950-99-2 USPATFULL
CN 2H-1-Benzopyran-6-ol, 3,4-dihydro-2,2,5,7,8-pentamethyl- (CA INDEX NAME)



=> **d his**

(FILE 'HOME' ENTERED AT 12:23:49 ON 27 AUG 2007)

FILE 'REGISTRY' ENTERED AT 12:24:10 ON 27 AUG 2007
L1 STRUCTURE UPLOADED
L2 8 S L1 EXA FULL

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:24:41 ON 27 AUG 2007
L3 511 S L2
L4 11 S L3 AND "PROSTATE CANCER"
L5 1 S L3 AND "ANDROGEN-DEPENDENT"

FILE 'REGISTRY' ENTERED AT 12:43:27 ON 27 AUG 2007
E "PMCOL"/CN 25

FILE 'REGISTRY' ENTERED AT 12:44:06 ON 27 AUG 2007
L6 1 S 950-99-2/RN
SET NOTICE 1 DISPLAY
SET NOTICE LOGIN DISPLAY

FILE 'MEDLINE, CAPLUS, WPIDS, USPATFULL' ENTERED AT 12:44:38 ON 27 AUG 2007
L7 510 S L6
L8 22 S L7 AND (CANCER OR TUMOR)

=>

---Logging off of STN---

=>
Executing the logoff script...

=> LOG Y

COST IN U.S. DOLLARS	SINCE FILE ENTRY	TOTAL SESSION
FULL ESTIMATED COST	152.10	306.03

DISCOUNT AMOUNTS (FOR QUALIFYING ACCOUNTS) SINCE FILE TOTAL

	ENTRY	SESSION
CA SUBSCRIBER PRICE	-7.02	-8.58

STN INTERNATIONAL LOGOFF AT 13:00:16 ON 27 AUG 2007